

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017034**Date Inspected:** 30-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Shi Gang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 9

DECK PANEL 14E-DP3157(PL3432A/B)-001

Gas Metal Arc and Submerged Arc Welding (GMAW/SAW) of DP3157-001 in process on gantry # 1. ZPMC Quality Control (QC) is identified as Mr. Zhu Zhong Jie. Weld Procedure Specification (WPS) is identified as WPS-B-T-2342-U1(urib)-5. Welding appears to conform to the requirements of the WPS used. The weld number and welder for respected weld are as follows.

Weld Joint # 001, 003, 007, 009; Welder # 201788

Weld Joint # 002, 004, 008, 010; Welder # 059443

Weld Joint # 005, 011; Welder # 059421

Weld Joint # 006, 012; Welder # 059418

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## DECK PANEL 14W-DP3169(PL3482A/B)-001

Gas Metal Arc and Submerged Arc Welding (GMAW/SAW) of DP3169-001 in process on gantry # 1. ZPMC Quality Control (QC) is identified as Mr. Zhu Zhong Jie. Weld Procedure Specification (WPS) is identified as WPS-B-T-2342-U1(urib)-5. Welding appears to conform to the requirements of the WPS used. The weld number and welder for respected weld are as follows.

Weld Joint # 001, 007; Welder # 059418

Weld Joint # 002, 008; Welder # 059421

Weld Joint # 005, 011; Welder # 059443

Weld Joint # 006, 012; Welder # 201788

During production welding of above mentioned deck panel (root pass by GMAW process) the arc has been stopped at various locations for four weld joints due to some malfunctioning. ZPMC and AB/F marked those locations for grinding & before start the production welding Magnetic Particle Testing (MT) carried out by ZPMC NDT personnel Mr. Liu Zhang Min at the "Arc stop" locations of the weld to confirm the complete removal of crack like discontinuity from the "Arc stop" locations. The locations & respective weld identification are as follows:

14W-DP3169-001-001; Y location: 590mm.

14W-DP3169-001-002; Y location: 400mm.

## Bay # 09, 14W-DP3175(PL3488A/B)-001

During random in process inspection this QA inspector observed that ZPMC personnel performing fit up by using Gas Metal Arc Welding (GMAW) process for U-rib to deck plate of above mentioned deck panel. Welders are identified as 059366 and 062305. ZPMC CWI is identified as Mr. Chen Shi Gang. The welding variables recorded by QC appeared to comply with WPS-B-T-2342-U5b(U-rib).

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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# WELDING INSPECTION REPORT

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## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Gaikwad,Umesh	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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